AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph 2, page 1, with the following amended paragraph:

(2) Many signal processing systems, such as audio signal processing systems, utilize delta-sigma modulators to provide output data with a high, in-band signal to noise ratio ("SNR"). Figure 1 depicts a conventional digital signal processing ("DSP") system 100 for processing a signal source 102 into a digital signal. For example, the DSP system 100 can be used to perform high quality encoding of super audio compact disk ("SACD") data. Analog-to-digital converter ("ADC") 104 receives an input signal from the signal source 102 and converts the signal into a digital signal represented by discrete digital data sampled at a particular sampling frequency, f_s. It is well known that operating at large multiples of the sampling frequency spreads typical noise signals across a larger frequency band, thus improving SNR. This is particularly true for audio signals because audio signals reside in a relatively small baseband between 0 Hz and 25 kHz. Currently, a typical ADC 104 operates at 128 times ("*") f_s, and operational frequencies are expected to increase to 256*f_s and beyond over time.

Please replace Paragraph 4, page 2, with the following amended paragraph:

(4) Delta-sigma modulator 108 includes an L-order loop filter 110 that includes a series of integration stages to shape the noise in the decimated output data out of the baseband. Delta-sigma modulator ~~112~~ 108 also includes a 1 or multi-bit quantizer 112 to provide a series of output bits representative of the baseband input signal by quantizing the output data of loop filter 110 and providing feedback to loop filter 110 in a well-known manner. "Delta-sigma modulators" are also commonly referred to using other interchangeable terms such as "sigma-delta modulators", "delta-sigma converters", "sigma delta converters", and "noise shapers".

Please replace Paragraph 24, pages 5-6, with the following amended paragraph:

(24) Referring to Figure 5, the signal source 502 of DSP system 500 provides an input signal to ADC 504. Signal source 502 and ADC 504 can be the same as signal source 102 and ADC 104. ADC operates at a frequency N times the sampling frequency of the input signal. In one embodiment, N equals 128, and 128*f_s equals approximately 6 MHz. The delta-sigma modulator 506 operates at a frequency of K * f_s. In one embodiment delta-sigma modulator 506

operates at a frequency one-half of the ADC 504's operating frequency. The delta-sigma modulator 506 provides output data to post-quantization component(s) 508. In one embodiment, post-quantization component(s) 508 represent an audio recording system, such as an SACD system, for recording high quality audio signals onto a media using the output data generated by the delta-sigma modulator 506. The delta-sigma modulator 506 includes an internal filter 510 that performs both integration functions and decimation/low-pass filtering functions. Quantizer 512 quantizes the output data from internal filter 510 and provides quantized output data to post quantization component(s) 508. Quantizer 512 provides the quantized output data as feedback to internal filter 510.

AMENDMENTS TO THE DRAWINGS

Please replace the drawing sheet containing Figure 2 with the attached amended drawing. The drawing has been amended as shown in red to insert "(Prior Art)" after "Fig. 2."